

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 34-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta (US 2001/0029531).

Referring to Claim 34, Ohta teaches a method of selecting one of a plurality of printers 12A-12C (fig. 1) in a network to receive a file to be printed on the instigation of a mobile device 11 (fig. 1), the network including the plurality of printers and plural access points that are wirelessly in range of the mobile device (see 16, 13-2, and 12A1-12C1 of fig. 19A noting that the print server can now be used as an access point) that can be carried in one hand (see 11¹ of fig. 1), the network being arranged so that the plurality of printers can communicate with the plurality of access points via the network (see lines 11-15 of paragraph [0037]), the method further comprising:

Measuring the strength of the signals as received at the mobile device and as transmitted from a plurality of the access points (see lines 1-5 of paragraph [0058]);

Combining indications of the measured signal strengths with stored signal strains for transmission of signals between the access points and the plural printers to derive

indications of total signal strengths from the mobile device to the plurality of printers via all existing signal paths from the mobile device to the plurality of printers and including the plurality of access points (see lines 1-11 of paragraph [0058]); and

>Selecting the printer in response to the indications of the total signal strengths (see lines 9-15 of paragraph [0058]).

Claims 36, 38, 40, and 41 have similar limitations as claim 34.

Referring to Claims 35, 37, and 39, Ohta also teaches transmitting the file to the selected printer for printing (see lines 4-7 of paragraph [0060]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17, 19, 22-26, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta (US 2001/0029531) in view of Taki (JP 10-191453 – English translation of ABSTRACT used).

Referring to Claim 1, Ohta teaches a method of selecting one of a plurality of printers 12A-12C (fig. 1) on a network to receive a file to be printed on the instigation of a mobile device that can be held in one hand 11 (fig. 1), the network including the plurality of printers, the method comprising:

wirelessly sending at least one user preference from the mobile device to a network print controller (see lines 15-19 of paragraph [0037]), the print controller 13 (fig. 1) responding to the sent preference by accessing predetermined properties of the plurality of networked printers (see lines 18-23 of paragraph [0037]).

Matching, at the network print controller, at least one of the predetermined properties of the plurality of networked printers with the sent at least one user preference (see lines 8-10 of paragraph [0007]), and

At the network print controller selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference (see lines 10-12 of paragraph [0007]).

Ohta does not teach an access point for enabling messages from the mobile device to be relayed to the plurality of printers via the network and wirelessly sending at least one user preference from the mobile device to the wireless access point thence to a network print controller. Taki teaches an access point 41 (fig. 1) for enabling messages from the mobile device to be relayed to the plurality of printers 30 (fig. 1) via the network 20 (fig. 1) and wirelessly sending at least one user preference from the mobile device to the wireless access point thence to a network print controller (see first 6 lines of SOLUTION of ABSTRACT noting that the information is transmitted from the PDA 10 to the service center 20 by way of access point 41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

provide the teachings of Taki to said device of Ohta in order to provide better security when performing wireless public print jobs.

Referring to Claim 16, Ohta teaches a method of printing a file to a selected printer 12A-12C (fig. 1) of a network including a plurality of printers, the printing being performed at the instigation of a mobile device that can be held in one hand 11 (fig. 1), the method comprising:

selecting a networked printer comprising:

wirelessly sending at least one user preference from the mobile device to a networked print controller 13 (fig. 1), the print controller responding to the sent preference by accessing predetermined properties of the plurality of networked printers (see lines 15-23 of paragraph [0037]),

matching, at the networked print controller, at least one of the predetermined properties of the plurality of networked printers with the at least one user preference (see lines 8-10 of paragraph [0007]), and

at the network print controller, selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference (see lines 10-12 of paragraph [0007]), and transmitting the file to the selected printer for printing (see lines 12-14 of paragraph [0007]).

Ohta does not teach wirelessly sending at least one user preference from the mobile device to the wireless access point thence to a network print controller. Taki teaches wirelessly sending at least one user preference from the mobile device to the

wireless access point thence to a network print controller (see first 6 lines of SOLUTION of ABSTRACT noting that the information is transmitted from the PDA 10 to the service center 20 by way of access point 41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Taki to said device of Ohta in order to provide better security when performing wireless public print jobs.

Referring to Claim 22, Ohta teaches an apparatus for selecting one of plural printers of a network including a plurality of printers 12A-12C (fig. 1), the selected printer being arranged to receive a file to be printed on the instigation of a mobile device that can be carried in one hand (see 11¹ of fig. 1) sending wireless message including the file to be printed and a reference for printer capability for the file to be printed (see lines 30-36 of paragraph [0037]), the apparatus comprising:

a print controller 13 (fig. 1) connected via the network to the plurality of printers of the network and having access to predetermined properties of the plurality of networked printers of the network (see lines 15-23 of paragraph [0037]); and

including a matching arrangement adapted to match at least one of the predetermined properties of the printers with the at least one user preference (see lines 10-12 of paragraph [0007]), and to select the printer that is to print the file in accordance with results of the match (see lines 10-14 of paragraph [0007]).

Ohta does not teach the network having an access point for providing access to devices on the network in response to a wireless message from the mobile device and the print controller being arranged to receive at least one user preference from the

mobile device via the access point. Taki teaches the network having an access point 41 (fig. 1) for providing access to devices 30 (fig. 1) on the network 20 (fig. 1) in response to a wireless message from the mobile device and the print controller being arranged to receive at least one user preference from the mobile device via the access point (see first 6 lines of SOLUTION of ABSTRACT noting that the information is transmitted from the PDA 10 to the service center 20 by way of access point 41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Taki to said device of Ohta in order to provide better security when performing wireless public print jobs.

Referring to Claims 2 and 24, Ohta also teaches determining a location of the mobile device relative to the access point 16 (fig. 1) of the network by measuring a transmitted wireless signal strength as received at the current location of the mobile device and transmitted from the access point (see lines 15-23 of paragraph [0037]);

Wherein the step of wirelessly sending at least one user preference from the mobile device to a networked print controller comprises wirelessly transmitting the measured signal strength to the print controller via the network (see lines 7-9 of paragraph [0058]);

Wherein the step of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises combining indications of the measured wireless signal strength at the mobile device with a plurality of stored wireless signal strengths between the access point and each of the

printer locations and comparing the combined indications (see lines 1-11 of paragraph [0058]); and

Wherein the step of selecting the printer that is to print the file is performed in response to a match resulting from the comparing step (see lines 9-15 of paragraph [0058]).

Referring to Claims 3 and 4, Ohta also teaches selecting at least one print requirement for the file, and communicating the print requirement to the print controller, wherein the step of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises comparing the at least one print requirement with the predetermined abilities of each of the networked printers and the selecting step comprises excluding all printers that do not have the desired at least one print requirement (see paragraph [0040]).

Referring to Claim 5, Ohta also teaches the predetermined abilities of the printers stored in the print controller and the method further comprises retrieving the stored predetermined abilities (see lines 4-6 of paragraph [0007]).

Referring to Claims 6, 7 and 8, Ohta also teaches the predetermined abilities of the printers are stored remotely from the print controller and the method further comprises retrieving the stored predetermined abilities from the remote store (see lines 4-10 of paragraph [0007]).

Referring to Claim 9, Ohta also teaches matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises comparing the current number and/or size of print jobs in a

memory of each of the printers and the step of selecting the printer that is to print the file comprises selecting the printer with the lowest current number and/or size of print jobs (see paragraph [0037]).

Referring to Claim 10, Ohta also teaches selecting the printer that is to print the file comprises selecting the printer having its strongest signal strength from the same access point as that of the strongest signal strength of the mobile device (see paragraph [0058]).

Referring to Claim 11, Ohta also teaches the network comprises a plurality of access points 16, 13-2, and 12A1-12C1 (fig. 19A noting that the print server can now be used as an access point) and the strongest signal strengths of the printer and the mobile device are equal, and the step of selecting the printer that is to print the file further comprises selecting the printer having its second strongest signal strength from the same access point as that of the second strongest signal strength of the mobile device (see paragraph [0058] noting that the user can select the printer in paragraph [0007]).

Referring to Claim 12, Ohta also teaches the network comprises a plurality of access points 16, 13-2, and 12A1-12C1 (fig. 19A noting that the print server can now be used as an access point) and the step of selecting the printer that is to print the file comprises selecting the printer having the largest number of non-zero signal strengths of the access points in common with the measured signal strengths at the mobile device (see paragraph [0058] noting that the user can select the printer in paragraph [0007]).

Referring to Claim 13, Ohta also teaches displaying to the user a list of details of a plurality of best-matched printers suitable for unique selection and the step of selecting the printer that is to print the file further comprises the user manually selecting one of the printers on the list (see paragraphs [0007] and [0048]).

Referring to Claim 14, Ohta also teaches displaying to the user a list of details of a plurality of best-matched printers suitable for unique selection comprises displaying the actual location of each of the plurality of best-matched printers (see paragraph [0048]).

Referring to Claim 15, Ohta also teaches sending to the mobile device a map of directions to the selected printer, a set of audio or written directions to the selected printer or a selected printer location name (see paragraph [0044]).

Referring to Claims 17 and 26, Ohta also teaches the file stored on the mobile device, is transmitted to the print controller via a the access point and subsequently forwarded from the access point onto the selected printer for print out (see paragraph [0037]).

Referring to Claims 19 and 28, Ohta also teaches accessing the relevant printer driver for the selected printer from a plurality of printer drivers stored at the print controller (see paragraph [0007]).

Referring to Claim 23, Ohta also teaches a program storage medium or device, readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of selecting one of a plurality of printers 12A-12C (fig. 1)

on a network to receive a file to be printed on the instigation of a mobile device that can be held in one hand 11 (fig. 1).

Referring to Claim 25, Ohta also teaches a program storage medium or device, readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of printing a file to a selected printer 12A-12C (fig. 1) of a network including a plurality of printers, the printing being performed at the instigation of a mobile device that can be held in one hand 11 (fig. 1), the method comprising selecting a networked printer (see lines 10-12 of paragraph [0007]).

Referring to Claims 29-31, Ohta also teaches the network including plural access points that are wirelessly in range of the mobile device (see 16, 13-2, and 12A1-12C1 of fig. 19A noting that the print server can now be used as an access point), the network being arranged so that the plurality of printers can communicate with the plurality of access points via the network (see lines 11-15 of paragraph [0037]), the method further comprising:

Measuring the strength of the signals as received at the mobile device and transmitted from the plurality of access points (see lines 1-5 of paragraph [0058]);

Combining indications of the measured signal strengths with stored signal strengths for transmission of signals between the access points and the plural printers to derive indications of total signal strengths from the mobile device to the plurality of printers via all existing signal paths from the mobile device to the plurality of printers and including the plurality of access points (see lines 1-11 of paragraph [0058]); and

The step of selecting the printer is in response to the indications of the total signal strengths (see lines 9-15 of paragraph [0058]).

Referring to Claims 32 and 33, Ohta also teaches the network including plural access points that are wirelessly in range of the mobile device (see 16, 13-2, and 12A1-12C1 of fig. 19A noting that the print server can now be used as an access point), the network being arranged so that the plurality of printers can communicate with the plurality of access points via the network (see lines 11-15 of paragraph [0037]), the strength of the signals as received at the mobile device and as transmitted from a plurality of the access points being measured and supplied to the machine (see lines 1-11 of paragraph [0058]), the method further comprising:

Combining indications of the measured signal strengths with stored signal strengths for transmission of signals between the access points and the plural printers to derive indications of total signal strengths from the mobile device to the plurality of printers via all existing signal paths from the mobile device to the plurality of printers and including the plurality of access points (see lines 1-11 of paragraph [0058]); and

The step of selecting the printer is in response to the indications of the total signal strengths (see lines 9-15 of paragraph [0058]).

Response to Arguments

5. Applicant's arguments with respect to claims 22, 34, 36, 38, 40, and 41 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 1/23/2008 have been fully considered but they are not persuasive.

Regarding Claims 34-41, the applicant argues that the Ohta reference does not teach "measuring the strength of the signals as received at the mobile device and as transmitted from a plurality of the access points" further arguing that the Ohta reference teaches the print stations doing the measuring, not the mobile station. However, the limitation does not specifically state which device is doing the measuring. The limitation does not rule out the access point measuring the strength of the signals before transmission to the mobile station, which can be done at a later time. Since no specific device is pointed to as performing the measuring the strength of the signals, Ohta still teaches "measuring the strength of the signals as received at the mobile device and as transmitted from a plurality of the access points".

Regarding Claims 1-17, 19, 22-26, and 28-33, the applicant argues that the Ohta and Taki references are not combinable. However, both references teach wireless mobile printing by use of a portable communications device. Furthermore, the claims do not state that security or transmission area is a factor in the limitations. Therefore, the examiner reiterates that the Ohta and Taki references are properly combinable because the Taki reference teaches "enabling messages from the mobile device to be relayed to the plurality of printers 30 (fig. 1) via the network 20 (fig. 1) and wirelessly sending at least one user preference from the mobile device to the wireless access point thence to a network print controller" and the combination with the Ohta reference enables the above process to be performed in a more secure manner.

The portable digital device in Ohta 11¹ (fig. 1) is clearly believed to be usable by one hand.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun
Primary Examiner
Art Unit 2618

/E. Y./
Primary Examiner, Art Unit 2618
/Eugene Yun/
Primary Examiner, Art Unit 2618

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618